

# **Interdisciplinary Instrumentation Colloquium**

## **The Allen Telescope Array: A New Telescope for SETI and Radio Astronomy**

Speaker: Dave DeBoer  
UC Berkeley Radio Astronomy Lab & SETI Institute

Date: Wednesday, October 19, 2005

Time: 4:00 PM sharp (refreshments at 3:45)

Place: LBNL, Building 50 Auditorium  
(directions at <http://InstrumentationColloquium.LBL.gov>)

The Allen Telescope Array (ATA) is a next generation radio telescope being built by a partnership between the SETI Institute and UC's Radio Astronomy Lab (RAL) at the RAL's Hat Creek Radio Observatory. Its novel design combines many 6.1-meter antennas (42 this year and ultimately 350) arrayed over a diameter of roughly 1 km. Each antenna sends two channels of approximately 10 GHz back to the lab, where they are combined in both phased array beams and correlators. The large field-of-view and ultrawide bandwidth provide the opportunity to conduct "commensal" observing programs by SETI and radio astronomy, whereby many observers simultaneously observe using the entire sensitivity of the array at their location and frequency of choice. This talk will describe the ATA, highlighting some of its technical innovations and give a progress report as well as a sampling of some of the scientific programs it will conduct.

Presentations (pdf files) and dates of future colloquia are posted at  
<http://InstrumentationColloquium.LBL.gov>

Suggestions for speakers and topics are welcome. Please contact  
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